STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION
NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
protecting the future for generations
Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
Colleen Cripps, Ph.D., Administrator

FACT SHEET
(pursuant to NAC 445A.236)

Applicant: Clark County Water Reclamation District (CCWRD)
5857 East Flamingo Road
Las Vegas, Nevada 89122

Permit Number: NS2001509 (Formerly NEV2001509)

Location: Desert Breeze Water Resource Center (DBWRC)
8320 West Flamingo Road
Las Vegas, Nevada 89149
Section 16, T21S, R60E MDB&M

Discharge Outfall: **Outfall 001:** Discharge to Las Vegas Valley Water District (LVVWD) wet well/storage reservoir

Latitude: 36° 06' 53" N **Longitude: 115° 16' 20" W**

General: The Permittee has applied for renewal of water pollution control discharge permit NS2001509 to operate a wastewater reclamation plant which provides tertiary treatment of sewage from within the facility's service area in western Las Vegas. DBWRC treats the effluent to meet the requirements for bacteriological quality set forth in NAC 445A.2762 for Reuse category A. The treated effluent is then pumped to a wet well/1.2 million gallon reclaimed water reservoir owned and operated by the LVVWD for distribution to golf courses, parks and other reuse application sites for irrigation.

The facility utilizes a full treatment process including preliminary treatment with bar screens, grit removal and flow equalization, secondary treatment with activated sludge and secondary clarifiers, and tertiary treatment with traveling bridge filters, and UV disinfection. Disinfection can also be supplemented with sodium hypochlorite to ensure that Total Coliform limits are met. The LVVWD provides additional chlorination prior to distribution to the irrigation reuse sites.

During the winter season when there may be an insufficient demand for reuse water, the Permittee may discharge treated effluent to the sanitary sewer system of the CCWRD Central Plant (NV0021261) for additional treatment. Additionally, sludge generated by the facility is discharged to the sanitary sewer for treatment at the CCWRD Central Plant.

During the past 5 years there have been two incidents of reported non-compliance. In both cases BOD measurements were reported slightly above 45 mg/L. On July 17, 2008 BOD was reported at 47.5 mg/L and on September 26, 2008 BOD was reported at 45.7 mg/L. For both dates, the facility indicated that there were no operational problems that accounted for

those results. Based on the favorable compliance history since those occurrences, the Permittee has requested that the current monitoring schedule be reduced from a daily requirement to 3 times per week.

Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV2001509 to NS2001509. This change does not reflect a change in the type of permit being issued. NEV and NS permits are for groundwater discharges to the State of Nevada. These are not to be confused with "NV" permits which are reserved for NPDES Permitting.

Corrective Actions Sites: There are no Bureau of Corrective Actions sites within one mile of the facility.

Well Head and Drinking Water Supply Protection: The facility is not within 6000' of a public water supply. A Wellhead Protection Area has not been established for this area.

Receiving Water Characteristics: The receiving water is groundwater in the Las Vegas Valley via landscape irrigation. The depth to water in this area is approximately 500 feet, and impacts from effluent reuse are not expected.

Permitted Reuse Water Users:
Rhodes Ranch Country Club Golf Course (NEV 2004500), Red Rock Country Club Golf Course (NEV 2002517), Bear's Best Golf Club Golf Course (NEV 2002515), Spanish Trail Golf Course (NEV 2002512), Siena Golf Course (NEV 2002519) and Red Ridge Park aka Rhodes Ranch 28-Acre Park (NEV2005507).

Flow: The facility's 30-day average discharge will be permitted at 4.9 MGD.

Proposed Effluent Limitations and Special Conditions:
The following permit limits and monitoring requirements are proposed for the Desert Breeze Water Reclamation Facility.

WWTP Discharge Limitations Table for Sample Location 001 (Influent Structure) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	<= 4.90 Million Gallons per Day (Mgal/d)	--------	Intake	001	Continuous	METER
Flow rate	Daily Maximum	M&R	--------	Intake	001	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 002 (Internal Outfall) To Be Reported Monthly

		Discharge Limitations		Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow, total	30 Day Average	M&R Million Gallons (Mgal)		Effluent Gross	002	Continuous	METER
Flow, total	Daily Maximum	M&R Million Gallons (Mgal)		Effluent Gross	002	Continuous	METER
BOD, 5-day[1]	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
BOD, 5-day[1]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
Coliform, total general	Geometric Mean		<= 2.20 Most Probable Number per 100ml T (MPN/100mL)	Effluent Gross	002	Three Per Week	DISCRT
Coliform, total general	Daily Maximum		<= 23 Most Probable Number per 100ml T (MPN/100mL)	Effluent Gross	002	Three Per Week	DISCRT
pH, minimum	Weekly Minimum		>= 6 Standard Units (SU)	Effluent Gross	002	Three Per Week	DISCRT
pH, maximum	Weekly Maximum		<= 9 Standard Units (SU)	Effluent Gross	002	Three Per Week	DISCRT
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS

1. Measurements derived from TOC analysis, using approved EPA methods, to predict BOD values

Definitions

Term	Definitions
MGD	Million gallons per day
M&R	Monitor and report
BOD_5	5-day biological oxygen demand
mg/L	Milligrams per liter
TSS	Total suspended solids
as N	As nitrogen
TOC	Total organic carbon

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance:

- The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit.

- Within 60 days of permit issuance (by **March 15, 2013),** the Permittee shall submit two (2) copies of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall be compiled in accordance with the appropriate sections of WTS-2, "*Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*".

- If no updates or revisions are required, the Permittee shall submit a letter by the above due date stating that there have been no changes to the previously approved O&M Manual.

Rationale for Permit Requirements: Monitoring is required to demonstrate that tertiary treatment is being provided and to determine when design capacity is being approached.

Influent Flow: The influent flow rate limitation is based on the design capacity of the Desert Breeze Water Resource Center.

Effluent flow: Effluent flow is monitored to calculate the mass of Total N, BOD_5 and TSS for compliance.

Biochemical Oxygen Demand, 5-day (BOD_5): The BOD_5 limits of 30 mg/L and 45 mg/L for the 30-day average and the daily maximum, respectively, are proposed permit limits retained from the previous permit. The influent BOD_5 concentrations are monitored to determine the plant's treatment efficiency.

Total Suspended Solids: The proposed permit limits are retained from the previous permit. The influent TSS concentration is monitored to determine the plant's treatment efficiency.

Total Coliform: Total Coliform limits required by NAC 445A.276, Category A, for reuse of treated effluent are appropriate for this discharge.

Total Nitrogen Species as N: Nitrogen parameters are monitored to determine loading rates for reuse sites. The proposed permit limit is retained from the previous permit.

pH: The proposed permit limit is retained from the previous permit.

Proposed Determination: The Division has made the tentative determination to renew the proposed permit for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to renew the permit for a five-year period, authorizing this facility to discharge subject to the conditions contained within the permit, is being sent to the **Las Vegas Review Journal** for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **January 7, 2013 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Michele Reid
Date: December 2012